TechnoMid PA6 S GF 30 SZ

Polyamide 6

TechnoCompound GmbH

Message:

High mechanical strength and stiffness
High thermal stability
High toughness at low temperatures
Excellent sliding friction behavior
Optimal flow characteristics for challenging applications
Suitable for low-warpage injection molding parts
Also "cross-linkable" available
Typical Applications
Automotive: Radiator grills, exterior door handles, door sills, door-mirror housings, wheel covers, steering wheels, fastening clips, gearshift-lever housings, shift links, headlamp housings, power and fuse boxes, front-End-Modules, bumper stiffener, air intake modules, engine covers "Beauty-Cover", valve bonnet and cylinder head covers, chain guides, toothed belt covers, ventilation and cooling systems...
Household: Chair frames, furniture casters, craft toll shafts...
Sanitation: Handles, fittings, fixtures and fans
Plumbing: Wall dowels , fasteners, clamps for cables and pipes

General Information	
Filler / Reinforcement	Glass fiber reinforced material, 30% filler by weight
Features	Low warpage Low Temperature Flexibility Rigidity, high High strength Good liquidity Thermal stability, good
Uses	Handle Pipe components Household goods Fasteners Accessories Application in Automobile Field Shell Bathroom products
Processing Method	Injection molding

Physical	Nominal Value	Unit	Test Method
Density	1.31	g/cm³	ISO 1183
Molding Shrinkage [1]			ISO 294-4
Transverse flow	0.50	%	ISO 294-4
Flow	0.10	%	ISO 294-4
Water Absorption			ISO 62

Saturated, 23°C	6.2	%	ISO 62
Equilibrium, 23°C, 50% RH	2.0	%	ISO 62
Viscosity Number	150	cm^3/g	ISO 307
Hardness	**Nominal Value**	**Unit**	**Test Method**
Ball Indentation Hardness [2]	170	MPa	ISO 2039-1
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	8700	MPa	ISO 527-2/1
Tensile Stress			
Yield	150	MPa	ISO 527-2/50
Fracture	150	MPa	ISO 527-2/5
Tensile Strain			
Yield	4.0	%	ISO 527-2/50
Fracture	4.0	%	ISO 527-2/5
Flexural Modulus [3]	7400	MPa	ISO 178
Flexural Stress [4]	220	MPa	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-30°C	15	kJ/m^2	ISO 179/1eA
23°C	17	kJ/m^2	ISO 179/1eA
Charpy Unnotched Impact Strength			ISO 179/1eU
-30°C	45	kJ/m^2	ISO 179/1eU
23°C	50	kJ/m^2	ISO 179/1eU
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature			
0.45 MPa, not annealed	220	°C	ISO 75-2/B
1.8 MPa, not annealed	205	°C	ISO 75-2/A
8.0 MPa, not annealed	85.0	°C	ISO 75-2/C
Melting Temperature [5]	220	°C	ISO 11357-3
Linear thermal expansion coefficient			ISO 11359-2
Flow: 23 to 80°C	2.0E-5 - 4.0E-5	cm/cm/°C	ISO 11359-2
Lateral: 23 to 80°C	9.0E-5 - 1.1E-4	cm/cm/°C	ISO 11359-2
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	1.0E+12	ohms	IEC 60093
Volume Resistivity	1.0E+15	ohms·cm	IEC 60093
Dielectric Strength (1.00 mm)	35	kV/mm	IEC 60243-1
Relative Permittivity (1 MHz)	3.80		IEC 60250
Comparative Tracking Index (Solution A)	550	V	IEC 60112
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.8 mm)	HB		UL 94
NOTE			
1.	260°C / WZ 80°C, 600 bar		
2.	358 N		

3.	2.0 mm/min
4.	2.0 mm/min
5.	10°C/min

Recommended distributors for this material

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